

What is claimed is:

1. A probiotic composition comprising:  
a Lactic Acid Bacteria (LAB) suspended in an edible oil wherein said edible oil has prebiotic properties.
2. The probiotic composition according to claim 1 wherein said LAB is selected from the group consisting of *Lactobacillus acidophilus*, *L. amylovorus*, *L. brevis*, *L. bulgaricus*, *L. casei* spp. *casei*, *L. casei* spp. *ramnosus*, *L. crispatus*, *L. delbrueckii* ssp. *lactis*, *L. fermentum*, *L. helveticus*, *L. johnsonii*, *L. paracasei*, *L. pentosus*, *L. plantarum*, *L. reuteri*, *L. sake*, *Bifidobacterium animalis*, *B. bifidum*, *B. breve*, *B. infantis*, *B. longum*, *Pediococcus acidilactici*, *Propionibacterium acidipropionici*, *P. freudenreichii*, *P. jensenii*, *P. theonii*, *Streptococcus cremoris*, *S. lactis*, *S. thermophilus* and combinations thereof.
3. The probiotic composition according to claim 1 wherein said prebiotic edible oil is selected from the group consisting of fish oil, olive oil, rice-bran oil, soy oil and combinations thereof.
4. The probiotic composition according to claim 1 wherein said LAB is *L. casei* strain KE01 having ATCC number PTA 3945.
5. The probiotic composition of according to any one of claims 1 through 4 further comprising a hard two-piece capsule wherein said gelatin/vegetable capsule is nitrogen purged and instant bonded (NPIB).
6. A probiotic composition comprising *Lactobacillus casei* strain KE01 ATCC number having ATCC number PTA 3945 suspended in an edible oil wherein said edible oil has prebiotic properties and is selected from the group consisting of fish oil, olive oil, rice-bran oil, soy oil and combinations thereof.
7. The probiotic composition of according to claim 6 further comprising a hard gelatin/vegetable capsule wherein said gelatin/vegetable capsule is nitrogen purged and instant bonded (NPIB).
8. A probiotic composition comprising *Lactobacillus casei* strain KE01 ATCC number having ATCC number PTA 3945 suspended in an edible oil wherein said edible oil has prebiotic properties and is selected from the group consisting of fish oil, olive oil, rice-bran oil, soy oil and combinations thereof.

9. The probiotic composition of according to claim 8 wherein said edible oil is fish oil.
10. The probiotic composition of according to claim 8 wherein said edible oil is olive oil.
11. The probiotic composition of according to claim 8 wherein said edible oil is rice-bran oil.
12. The probiotic composition of according to claim 8 wherein said edible oil is soy oil.
13. The probiotic composition of according to any one of claims 8 through 12 further comprising a stabilizing ingredient selected from the group consisting of soybean oligosaccharides, fructooligosaccharides, galactooligosaccharides, galactosyl lactose and palatinose, lactulose, lactitol, xylitol, sorbitol, mannitol, trehalose, glucose, sucrose, fructose, maltose, milk, milk powders, whey, whey protein concentrates, casein, casein hydrolysates, lactoferrin, lactoperoxidase, lactoglobulins, glycomacropeptides, lacto-saccharides, lacto-lipids.
14. The probiotic composition of according to any one of claims 8 through 12 further comprising a hard two piece capsule wherein said gelatin/vegetable capsule is nitrogen purged and instant bonded (NPIB).
15. A probiotic composition comprising *Lactobacillus casei* strain KE01 ATCC number having ATCC number PTA 3945 suspended in prebiotic olive oil and wherein said probiotic composition is enclosed in a hard two piece capsule, said hard two piece capsule being nitrogen purged and instant bonded (NPIB).
16. A method for making a probiotic composition comprising:
  - emulsifying a Lactic Acid Bacteria (LAB) in an edible oil to form an emulsified probiotic, said edible oil having prebiotic properties;
  - filling a hard capsule body with said emulsified probiotic while said capsule is in the vertical orientation;
  - securing a cap onto said vertically aligned hard capsule body containing said emulsified probiotic to form a filled capsule;
  - purging said filed capsule with a Noble Gas; and

sealing said capsule body to said capsule cap while said capsule body and said capsule cap are in said vertically aligned orientation.

17. The method according to claim 16 wherein the emulsifying step further comprises an edible oil selected from the group consisting of fish oil, olive oil, rice-bran oil, soy oil and combinations thereof.

18. The method according to claim 16 wherein the emulsifying step further comprises an LAB selected from the group consisting of *Lactobacillus acidophilus*, *L. amylovorus*, *L. brevis*, *L. bulgaricus*, *L. casei* spp. *casei*, *L. casei* spp. *ramnosus*, *L. crispatus*, *L. delbrueckii* ssp. *lactis*, *L. fermentum*, *L. helveticus*, *L. johnsonii*, *L. paracasei*, *L. pentosus*, *L. plantarum*, *L. reuteri*, *L. sake*, *Bifidobacterium animalis*, *B. bifidum*, *B. breve*, *B. infantis*, *B. longum*, *Pediococcus acidilactici*, *Propionibacterium acidipropionici*, *P. freudenreichii*, *P. jensenii*, *P. theonii*, *Streptococcus cremoris*, *S. lactis*, *S. thermophilus* and combinations thereof.

19. The method according to claim 18 LAB is *L. casei* strain KE01 having ATCC number PTA 3945.

20. The method according to claim 16 wherein the filling step further comprises a hard capsule derived from vegetables, animal gelatin synthetic polymers or natural polymers.

21. The method according to claim 16 wherein the purging step further comprises a gas selected from the group consisting of Nitrogen, Argon and carbon dioxide.

22. The method according to claim 16 wherein the sealing step further comprises an organic solvent selected from the group consisting of isopropyl alcohol and ethanol.

23. A pair of KE01 specific primers wherein said KE01 specific primers consists of positive and negative strand and said positive primer is SEQ ID NO 1 and said negative strand in SEQ ID NO 2.